

WHAT IS CLAIMED IS:

1. A method of modifying a programmable schedule for a controller having a user interface, the method comprising the steps of:

providing, simultaneously or sequentially, two or more schedule override choices to a user via the user interface;

accepting a selection of one of the two or more schedule override choices from the user via the user interface; and

modifying temporarily the schedule based on the user responses provided by the user interface.

2. The method according to claim 1, further comprising returning to a normal program schedule after the temporary modification expires.

3. The method according to claim 1, wherein the providing step comprises providing one or more natural language schedule override choices.

4. The method according to claim 1, wherein the accepting step further comprises accepting a schedule override start time, end time or duration, and temperature.

5. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “Come Home Early”.

6. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “Come Home Late”.

7. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “Get Up Early”.

8. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “Stay Up Late”.

9. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “Stay Home”.

10. The method according to claim 1, wherein the providing step comprises providing a natural language schedule override choice of “On Vacation”.

11. A controller comprising:
a programmable schedule; and
a user interface, adapted and configured to provide two or more schedule override choices to a user, and accepting the selection of one of the two or more schedule override choices from the user;
wherein, the schedule is temporarily modified based on the user responses provided by the user interface.

12. The controller according to claim 11, wherein the user interface comprises a touchscreen.

13. The controller according to claim 11, wherein the user interface provides one or more natural language schedule override choices.

14. The controller according to claim 11, wherein the user interface accepts a schedule override start time, end time and temperature.

15. The controller according to claim 11, wherein the user interface provides a schedule override choice of “Come Home Early”.

16. The controller according to claim 11, wherein the user interface provides a schedule override choice of “Come Home Late”.

17. The controller according to claim 11, wherein the user interface provides a schedule override choice of “Get Up Early”.

18. The controller according to claim 11, wherein the user interface provides a schedule override choice of “Stay Up Late”.

19. The controller according to claim 11, wherein the user interface provides a schedule override choice of “Stay Home”.

20. The controller according to claim 11, wherein the user interface provides a schedule override choice of “On Vacation”.

21. A controller comprising:
a programmable schedule; and
a user interface, adapted and configured to provide one or more schedule override choices to a user, and accepting the selection of one of the two or more schedule override choices from the user;

wherein, the one or more schedule override choices includes a schedule override choice of “Come Home Early” and the schedule is temporarily modified based on the user responses provided by the user interface.

22. A controller comprising:
a programmable schedule; and
a user interface, adapted and configured to provide one or more schedule override choices to a user, and accepting the selection of one of the two or more schedule override choices from the user;

wherein, the one or more schedule override choices includes a schedule override choice of “Come Home Late” and the schedule is temporarily modified based on the user responses provided by the user interface.

23. A controller comprising:

a programmable schedule; and

a user interface, adapted and configured to provide one or more schedule override choices to a user, and accepting the selection of one of the two or more schedule override choices from the user;

wherein, the one or more schedule override choices includes a schedule override choice of “Get Up Early” and the schedule is temporarily modified based on the user responses provided by the user interface.

24. A method of modifying a programmable HVAC schedule for a controller having a user interface, the method comprising the steps of:

providing one or more schedule override choices to a user via the user interface;

accepting one or more user responses to the one or more schedule override choices from the user via the user interface at a first time; and

modifying temporarily the schedule based on the user responses provided by the user interface at a second time;

wherein, the second time is later than the first time.

25. The method according to claim 24, wherein the modifying step comprises the second time being later than the first time by a chosen time interval.

26. The method according to claim 25, wherein the modifying step comprises a chosen time interval is at least 10 minutes.

27. The method according to claim 25, wherein the modifying step comprises a chosen time interval is at least 30 minutes.

28. The method according to claim 25, wherein the modifying step comprises a chosen time interval is at least 1 hour.

29. The method according to claim 25, wherein the modifying step comprises a chosen time interval is at least 24 hours.

30. The method according to claim 24, wherein the accepting step further comprises accepting a schedule override start time, end time or duration, and temperature, wherein the start time is the second time.

31. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “Come Home Early”.

32. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “Come Home Late”.

33. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “Get Up Early”.

34. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “Stay Up Late”.

35. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “Stay Home”.

36. The method according to claim 24, wherein the providing step comprises providing a schedule override choice of “On Vacation”.

37. A controller comprising:
a programmable schedule; and
a user interface, adapted and configured to provide one or more schedule override choices to a user, and accept one or more user responses to the one or more schedule override choices from the user at a first time;
wherein, the schedule is modified at a second time based on the user responses provided by the user interface and the second time is later than the first time.

38. The controller according to claim 24, wherein the second time being later than the first time by a chosen time interval.

39. The controller according to claim 38, wherein the chosen time interval is at least 10 minutes.

40. The controller according to claim 38, wherein the chosen time interval is at least 30 minutes.

41. The controller according to claim 38 wherein the chosen time interval is at least 1 hour.

42. The controller according to claim 38, wherein the chosen time interval is at least 24 hours.

43. The controller according to claim 37, wherein the user interface accepts a schedule override start time, end time or duration, and temperature, wherein the start time is the second time.

44. A method of modifying a programmable HVAC schedule for a controller having a user interface, the method comprising the steps of:

providing one or more schedule comfort override menu choices to a user via the user interface;

accepting a start time, end time or duration, and comfort temperature response to the one or more schedule comfort override choices from the user via the user interface at a first time; and

modifying the schedule based on the user responses provided by the user interface at a second time;

wherein, the second time is later than the first time by a chosen time interval.

45. The method according to claim 44, wherein the providing step comprises providing a schedule comfort override choice of “Come Home Early”.

46. The method according to claim 45, wherein the providing step comprises providing a schedule comfort override choice of “Get Up Early”.

47. The method according to claim 45, wherein the providing step comprises providing a schedule comfort override choice of “Stay Up Late”.

48. The method according to claim 45, wherein the providing step comprises providing a schedule comfort override choice of “Stay Home”.

49. The method according to claim 45, wherein the providing step comprises providing an energy savings override choice of “On Vacation”.

50. A method of modifying a programmable HVAC schedule for a controller having a user interface, the method comprising the steps of:

providing one or more schedule energy saving override menu choices to a user via the user interface;

accepting a start time, end time or duration, and energy saving temperature response to the one or more schedule comfort override choices from the user via the user interface at a first time; and

modifying the schedule based on the user responses provided by the user interface at a second time;

wherein, the second time is later than the first time.

51. The method according to claim 50, wherein the modifying step comprises the second time being later than the first time by a chosen time interval.

52. The method according to claim 50, wherein the providing step comprises providing a schedule energy savings override choice of “Come Home Late”.

53. The method according to claim 50, wherein the providing step comprises providing a schedule energy savings override choice of “On Vacation”.

54. A method for controlling an HVAC system that is adapted to modify and control at least one environmental condition of an inside space against a first set point, the method comprising:

deactivating at least part of the HVAC system to not modify and control at least one environmental condition of the inside space;

monitoring the environmental condition in the inside space that the HVAC system is no longer modifying and controlling; and

automatically activating the at least one part of the HVAC system to again modify the environmental condition in the inside space if the environmental condition in the

inside space passes a second set point, wherein the second set point is different than the first set point.

55. A method according to claim 54 wherein the at least one environmental condition is one or more of temperature and humidity.

56. A method according to claim 55 wherein the second set point is user selectable.

57. A method for controlling an HVAC system that has a fan that normally operates during heating and/or cooling operations, the method comprising:

requesting a time indicator from a user;

over-riding the fan for a time corresponding to the time indicator provided by the user; and

returning to normal fan operation after the time expires.

58. A method for controlling an HVAC system that is adapted to modify and control at least one environmental condition of an inside space of a structure, the structure having at least one window that opens and closes, the method comprising:

detecting an indication that a window is or has been opened;

deactivating at least part of the HVAC system to not modify and control at least one environmental condition of the inside space;

detecting an indication that the window is or has been closed;

activating the at least part of the HVAC system that was deactivated to again modify and control the at least one environmental condition of the inside space.

59. A method according to claim 58 wherein the indication that a window is or has been opened is provided by a user.

60. A method according to claim 59 wherein the indication that a window is or has been closed is provided by a user.

61. A method according to claim 58 further comprising the step of providing an alarm if one or more environmental conditions falls outside of a predetermined range while the at least part of the HVAC system is deactivated.

62. A method according to claim 61 wherein the alarm is provided when an inside temperature drifts beyond an open window temperature set point.

63. A method according to claim 61 wherein the alarm is provided when an inside humidity level drifts beyond an open window humidity set point.

64. A method according to claim 61 wherein the alarm is provided when an inside air quality falls outside of an open window air quality range.

65. A method according to claim 61 wherein the alarm is provided when the barometric pressure drops by a predetermined amount.

66. A method for controlling an HVAC system that is adapted to modify and control an environmental condition of an inside space of a structure, the method comprising:

controlling the environmental condition using a first control set point;

sensing the environmental condition outside of the structure; and

adjusting the first control set point if the environmental condition outside of the structure passes a predetermined value.

67. A method according to claim 66 wherein the environmental condition is temperature.

68. A method according to claim 66 wherein the environmental condition is humidity.

69. A method according to claim 67 wherein the first control set point is adjusted in a manner that reduces the load on the HVAC system.

70. A method according to claim 67 wherein the first control set point is only allowed to be adjusted by a predetermined amount.

71. A method for controlling an HVAC system that is adapted to modify and control an environmental condition of an inside space of a structure, the HVAC system having a duty cycle that varies with the environmental condition outside of the structure, the method comprising:

controlling the environmental condition in the inside space using a first control set point;

sensing the duty cycle of the HVAC system; and

adjusting the first control set point if the duty cycle of the HVAC system exceeds a predetermined value.